

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1, 2, 4-8, and 10-13 are pending in the present application, Claims 1, 2, 5, 7, 8, 10, 11, and 12 having been amended, and Claims 3 and 9 having been canceled without prejudice or disclaimer. Support for the amendments to Claims 1, 2, 5, 7, 8, 10, 11, and 12 is found, for example, in original Claims 3 and 9, and in the specification at pages 8-15 and pages 20-21. Applicant respectfully submits that no new matter is added.

In the outstanding Office Action, Claims 1, 2, 7, 8, and 13-16 were provisionally rejected under non-statutory obviousness-type double patenting as unpatentable over Claims 1, 16, and 29-32 of copending Application Serial No. 10/536,580; and Claims 1-13 were rejected as unpatentable over *A Self-organizing Semantic Map for Information Retrieval*, by Xia Lin (hereinafter Lin) in view of Wolff (U.S. Patent No. 5,847,708).

With respect to the provisional double patenting rejection, Applicant respectfully requests that the provisional double patenting rejection of Claims 1, 2, 7, 8, and 13-16 be held in abeyance until the conditions are ripe for a non-provisional double patenting rejection.

With respect to the rejection of Claim 1 as unpatentable over Lin in view of Wolff, Applicant respectfully submits that the amendment to Claim 1 overcomes this ground of rejection.

Amended Claim 1 is directed toward an information retrieval apparatus for searching a set of information items and displaying results of the search using a self-organizing map, the apparatus including: a graphical user interface operable to display a representation of at least some of the information items as a n-dimensional array of display points within the self-organizing map within a display area, the information items each having a set of characterizing information features which include data representative of one or more video

images, a processor configured to train the self-organizing map, using color histograms for each video image, to an effect that the color histogram representing the video image of the information item when applied to an input of the self-organizing map as a feature vector identifies one of a plurality of output nodes, the output nodes being arranged to identify points within the self-organizing map, a user control operable in response to a user input to select a video image of an information item, and a search processor operable to form a color histogram of the user selected video image, to generate a user defined feature vector from the user selected video image using the color histogram, to search the set of information items by applying the user defined feature vector to the input of the self-organizing map to identify information items which include video images having color histograms corresponding to that of the user defined video image, and to perform a related search with respect to the user selected video image by identifying, from the self-organizing map, information items which correspond to positions in the array which are neighbouring positions with respect to the array position corresponding to the user selected video image.

Particularly, amended Claim 1 recites, *inter alia*, “the information items each having a set of characterizing information features which include data representative of one or more video images...a search processor operable to form a color histogram of the user selected video image, to generate a user defined feature vector from the user selected video image using the color histogram...to perform a related search with respect to the user selected video image by identifying, from the self-organizing map, information items which correspond to positions in the array which are neighboring positions with respect to the array position corresponding to the user selected video image.”

Lin does not disclose or suggest that information items include video images which are used to form feature vectors. Furthermore, there is no disclosure of generating color histograms of those video images and searching for information items corresponding to the

selected video image by generating a corresponding color histogram, using the color histogram to form a feature vector and applying the feature vector to the self-organizing map to identify information items having corresponding video images.

Furthermore, Wolff does not cure the deficiencies in Lin. The searching performed in Wolff uses text information as metadata associated with each information item. Thus, as disclosed for example, from col. 6, line 53 to col. 7 of Wolff, information items are displayed as icons in a display screen. The icons are displayed on the display screen using a similarity measure to position items at locations on the display which have similar content. However, the similarity measure as defined in cols. 9 and 10 of Wolff is determined on the basis of feature metrics. As disclosed at lines 5-15 of col. 9 of Wolff, the feature includes things such as key words, number of links, time visited, etc. Therefore, there is no indication that this is done on the basis of a color histogram of those video images. In addition, the similarity measure is merely used as an arrangement for positioning similar items at the same location on a display screen or at least in proximity to each other. There is no indication that searching is performed on the basis of a color histogram from the video images.

In view of the above-noted distinctions, Applicant respectfully submits that a person of ordinary skill in the art, could not properly combine Lin and Wolff to arrive at the claimed invention.

Applicant respectfully submits that Claim 1 (and any claims dependent thereon) patentably distinguish over Lin and Wolff, taken alone or in proper combination. Amended Claim 7 recites elements similar to those of Claim 1. Applicant respectfully submits that Claim 7 (and any claims dependent thereon) patentably distinguish over Lin and Wolff, taken alone or in proper combination, for at least the reasons stated for Claim 1.

Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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